

NOTES ON A SPECIES OF RAT (*MUS TOMPSONII*,
RAMSAY), NOW INFESTING THE WESTERN POR-
TION OF N.S.W.

By K. H. BENNETT.

These rats made their appearance in the Ivanhoe district in February of the present year, but at that time only as scattered individuals. By the middle of April the whole country west of the main road from Booligal to Wilcannia was swarming with them, all travelling in a southerly direction; and so numerous were they that on loose sandy spots, and along dry dusty roads (trending south), the tracks of horses, sheep, and vehicles were nightly as completely obliterated by the foot-prints of the passing swarms, as if the surface of the soil had been swept with a broom. On one occasion at an out-station on Kilfera Run, a large number of sheep had been put through a gate near the house on the afternoon of my arrival, and of course thousands of tracks or foot-prints of sheep were visible on the dry dusty soil through and around the gate; but the next morning not a track was to be seen, and the whole ground was as smooth as if swept by a broom or a strong wind, although the night was perfectly calm. A close inspection, however, soon revealed the cause which was entirely owing to the swarms of rats that had passed during the night, millions of tiny foot-prints completely smoothing the dusty soil. These journeys were always performed during the night, the rats hiding in the day time in rabbit-warrens, deep fissures in the ground, or amongst dense masses of herbage. Their food consists chiefly of seeds of various kinds, and the soft succulent stems of a plant locally known as "pigweed," which owing to the good season is extremely plentiful; but I am inclined to think that their diet is not exclusively confined to vegetable substances, as I have been

informed by several rabbiters that they devour the young rabbits caught in their traps. For this reason and from the fact that in many places more rats than rabbits are caught in the traps—although the latter animals are numerous—they are held in detestation by the rabbiters. When I left the Ivanhoe district about the middle of May, the main body had passed on in a southerly direction, but numerous stragglers still remained. On my arrival here (Tilpa, Middle Darling) towards the end of that month, I found them tolerably numerous along the river, and for some short distance out, but in the back country towards Cobar they seem to be almost unknown. Within the last few days (July 12th) I have returned from a trip in that direction, and I find that they have become much more numerous along the river, and spread further out. Whether this is another invasion taking a more easterly direction than the preceding one, I am unable to say. I notice here that, in addition to living in deep fissures, masses of herbage, &c., they have constructed numerous burrows as if they intended to remain for some time, and they have already proved a great pest in the way of destruction to stores, &c. For some months previous to their appearance at Ivanhoe I had heard of their advance in a southerly direction from Western Queensland. At the time of their arrival on the Darling that river was in high flood, and the water extended out for miles, but strange to say this did not stop the onward march, for they soon appeared on the opposite side, much to the grief of some rabbiters who, thinking to pass off their skins for those of young rabbits, were detected in the fraud, and sentenced to a long term of imprisonment. At the time of their appearance at Ivanhoe the Willandra Creek—an anabranch of the Lachlan River—was also in high flood, but this did not stop them; and when I left they were in full march for the Lachlan. In the year 1864—a similar season to the present—there was a similar invasion of rats throughout this same country—the Darling being then in high flood—but although I then saw numbers of them, after this lapse of time I am unable to say whether they were identical with the present species or not; though in one respect they certainly seem to differ, for in addition

to making numerous burrows like the present animal, they also constructed large heaps of sticks, the rotting remains of which are after so many years still observable. Beneath these heaps they made large nests of soft dried grasses, the nests being placed in a shallow central hollow on the surface of the ground which was reached by burrows or tunnels from the outside beneath the pile of sticks. This invasion was accompanied by hundreds of hawks (*Elanus scriptus*), and various species of owls, which preyed on the rats. On this occasion neither hawks or owls have accompanied them.

In 1874 whilst on an exploring trip in search of sheep country in the Barrier Ranges, I come across numbers of these heaps tenanted by rats, and on setting fire to them as many as a dozen rats would run out, but as I did not take much notice of them I am unable to say whether they were identical with the present species or not. The hawks (*E. scriptus*) and owls were there in great numbers.